

THE INVENTOR CLAIMS:

1. A tube assembly for specimen analysis, comprising:

2 a tube having a pipette portion extending from a lower end
portion thereof, said pipette portion having a passage
4 therethrough, and

5 a separator having an upper portion sealingly engaged in
6 a lower portion of the tube, said tube having a reduced lower
7 portion defining a passage, whereby upon the filling of the tube to
8 a predetermined level and the centrifuging thereof, centrifuged
9 liquid passes through said separator passage to provide a specimen
10 of predetermined volume defined below the separator and above a
11 lower end of said reduced lower separator portion.

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2. A tube assembly according to Claim 1, wherein:

2 said separator has a generally funnel configuration, and an
air pocket is defined between the tube, the separator upper portion
4 and an end of the reduced lower separator portion.

3. A tube assembly according to Claim 2, wherein a
predetermined volume of specimen to be expressed is defined by said
air pocket.

4. A tube assembly according to Claim 3, wherein the
2 predetermined volume of specimen comprises 0.1 ml.

5. A tube assembly according to Claim 1, wherein said
2 separator is sealingly engaged by force-fitting thereof in a
tapered portion of the tube.

6. A tube assembly according to Claim 1, wherein:

2 specimen liquid and sediment are automatically mixed during
centrifuging by operation of the separator and an air pocket
4 created thereby.

7. A tube assembly according to Claim 1, wherein said tube
is tapered to narrow toward its lower portion and said separator is
force-fitted in a lower portion of the tube.

8. A tube assembly according to Claim 1, wherein a bead is
2 disposed about an upper open end of the tube for sealing engagement
with a cap to close the tube.

9. A tube assembly according to Claim 1, wherein said tube
2 pipette portion passage is tapered inwardly toward its opening.

10. A tube assembly according to Claim 1, and further
2 comprising:

a plug for sealing engagement in said pipette passage,

4 said plug being disposed in a cup adapted to engage a lower
portion of the tube when the plug is inserted in said pipette
6 passage.

11. A tube assembly according to Claim 10, wherein:

upon removal of said plug from the pipette passage, a
limited lowering of pressure within the tube tends to retain liquid
4 from dropping through the pipette passage.

12. A tube assembly for specimen analysis, comprising:

2 a tube having a pipette portion extending from a lower end
portion thereof, said pipette portion having a passage
4 therethrough,

a plug for sealing engagement in said pipette passage,

6 a cap for sealingly closing an upper open end portion of
the tube, and

8 a separator having an upper portion sealingly engaged in
the tube, said tube having a reduced lower portion defining a
10 passage, whereby upon the filling of the tube to a predetermined
level and the centrifuging thereof, centrifuged liquid passes
12 through said separator passage to provide a specimen of
predetermined volume defined below the separator and above a lower
14 end of the reduced lower separator portion for expressing thereof
upon removal of said plug.

13. A tube assembly according to Claim 12, wherein:

2 said separator has a generally funnel configuration, and an
air pocket is defined between the tube, the separator upper portion
4 and an end of the reduced lower separator portion.

14. A tube assembly according to Claim 12, wherein said
predetermined volume of specimen comprises 0.1 ml.

15. A tube assembly according to Claim 13, wherein:

2 specimen liquid and sediment are automatically mixed during
centrifuging by operation of the separator and an air pocket
4 created thereby.

16. A tube assembly according to Claim 12, wherein said
2 tube is tapered to narrow toward its lower portion and said
separator is force-fitted in a lower portion of the tube.

17. A tube assembly according to Claim 12, wherein a bead
is disposed about an upper open end of the tube for sealing
engagement with said cap.

18. A tube assembly according to Claim 12, wherein said
2 plug is disposed in a cup adapted to engage a lower portion of the
tube when the plug is inserted in said pipette passage.

19. A tube assembly according to Claim 18, wherein:

2 upon removal of said plug from the pipette passage, a
limited lowering of pressure within the tube tends to retain liquid
4 from dropping through the pipette passage.

20. A tube assembly according to Claim 1, and further
comprising:

 a plug adapted to seat about said pipette passage to seal
the passage,

 a spring disposed between the plug and the separator to
6 urge the plug to close the pipette passage, and

 a pin on said plug and extending through and outwardly from
8 the pipette passage,

 whereby a specimen is dispensed by urging said pin against
10 a specimen holder to displace the plug against the urging of the
spring.

21. A tube assembly according to Claim 20, wherein said
2 spring is an helical tapered spring.

22. A tube assembly according to Claim 20, wherein said
2 plug is of at least partially spherical configuration.

23. A tube assembly according to Claim 20, wherein said
2 pin extends to an upper end of the pipette passage to facilitate
passage of specimen through the passage.

24. A tube assembly according to Claim 1, wherein:

2 said separator has a lower portion of reduced diameter
defining a passage therethrough, and

4 said separator is of generally hemispherical configuration
to adapt the separator to receive a generally hemispherical probe
6 of an apparatus for the drawing of specimen via a passage through
the probe for automatic processing.

25. A tube assembly according to Claim 24, wherein:

2 an upper edge portion of said generally hemispherical
separator is tapered to a reduced thin edge portion to engage an
4 inner wall of the tube to prevent specimen sediment from entering
between the separator and the tube wall.

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